

Fig. 1
(Prior Art)

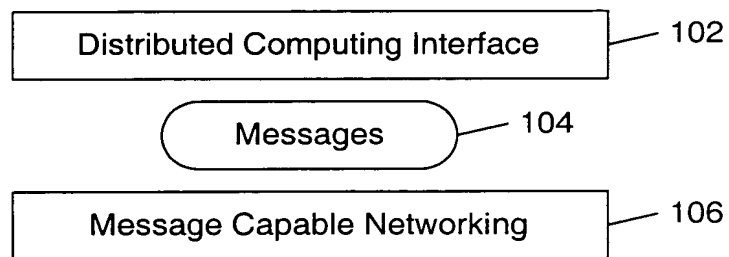


Fig. 2

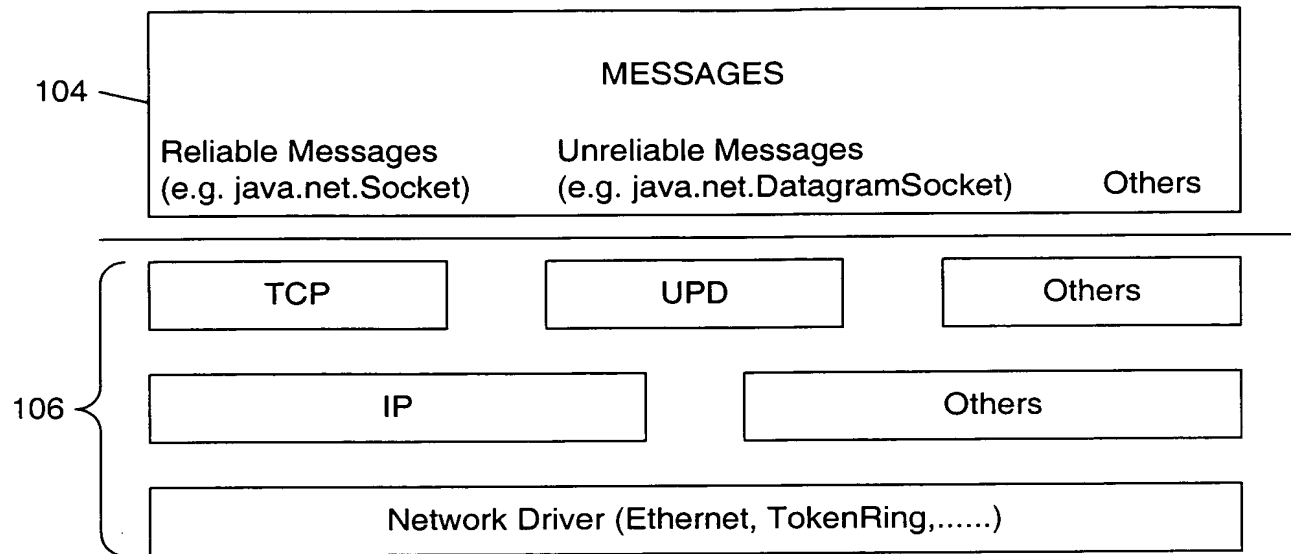


Fig. 3

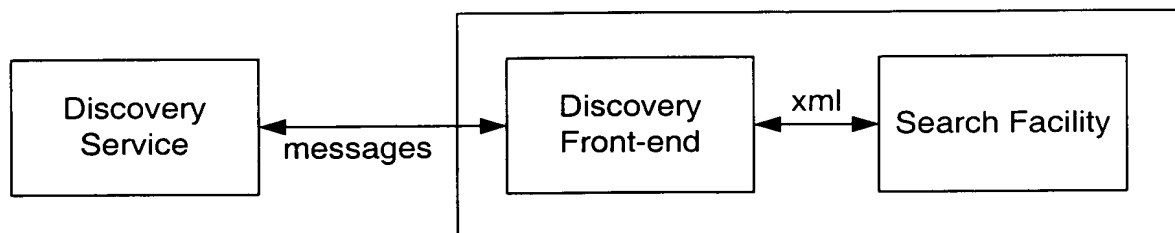


Fig. 4

09698791.102700
00/201" 16/85960

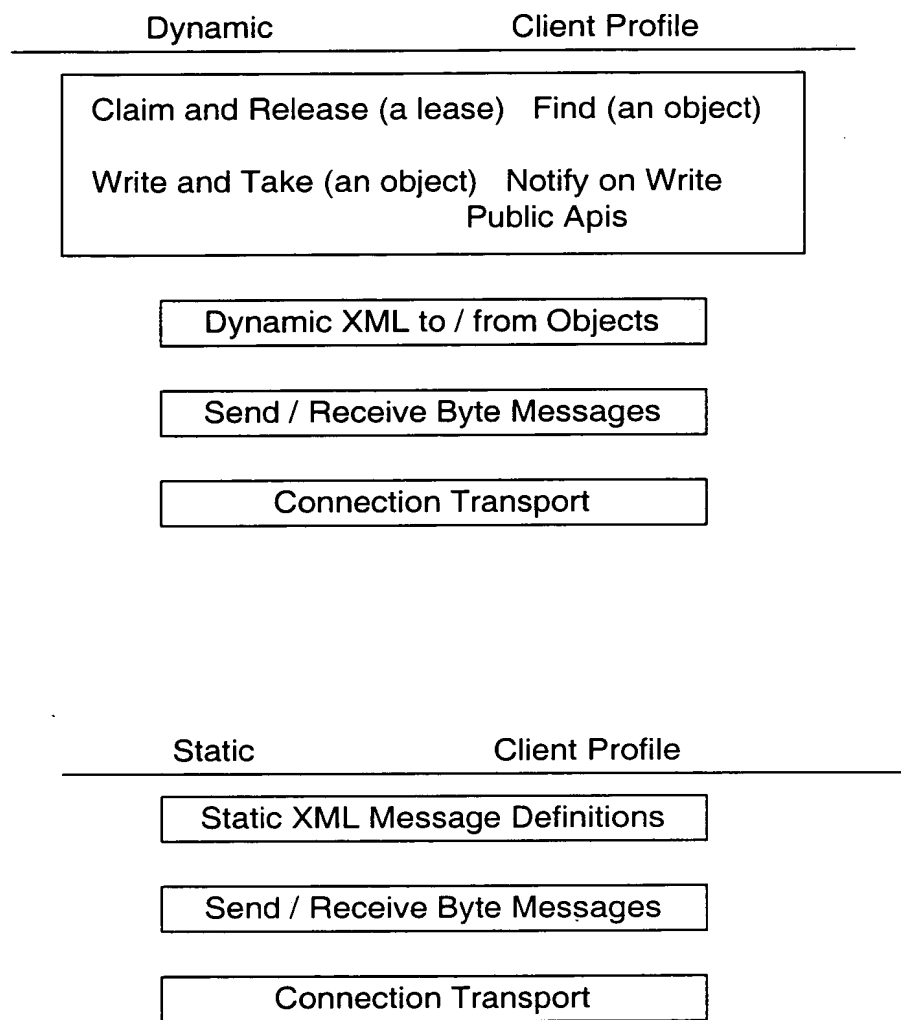


Fig. 5

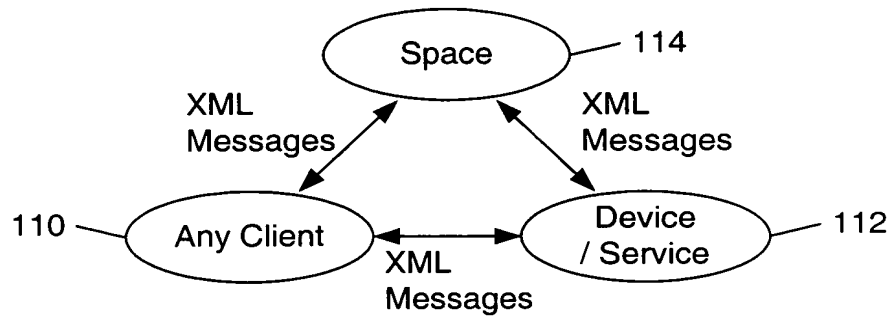


Fig. 6

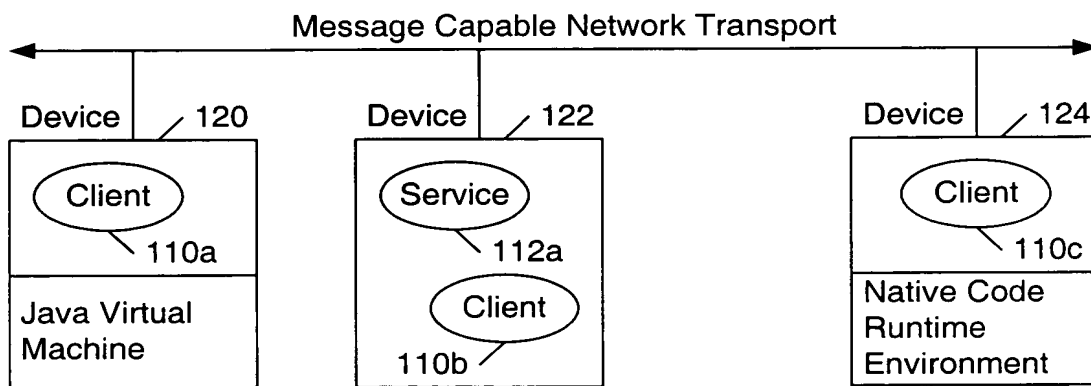


Fig. 7

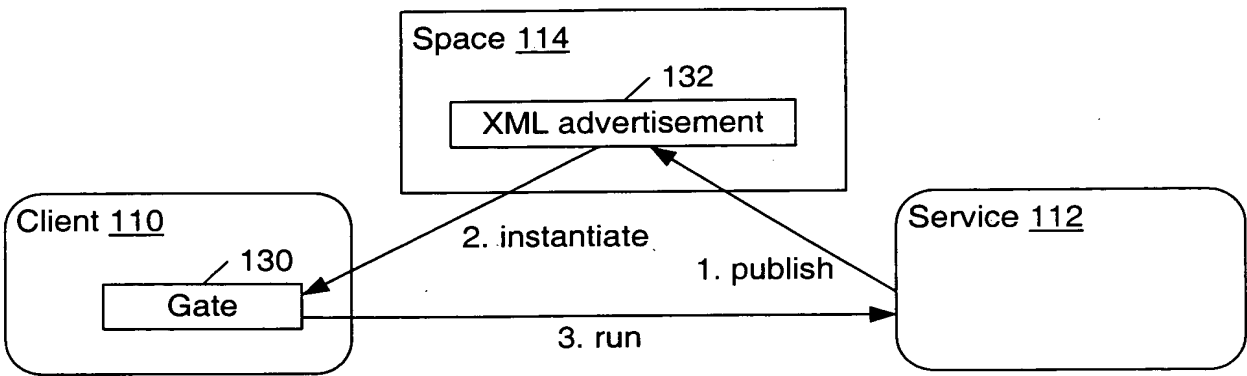


Fig. 8

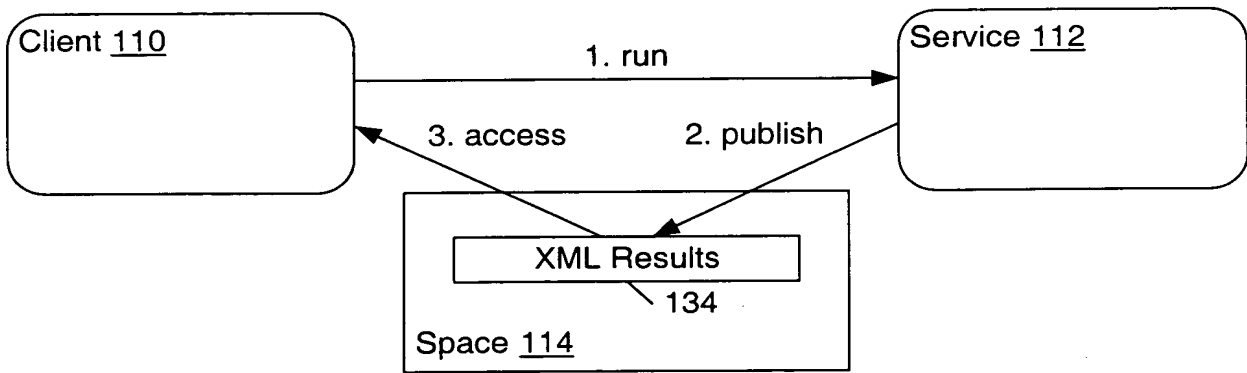


Fig. 9

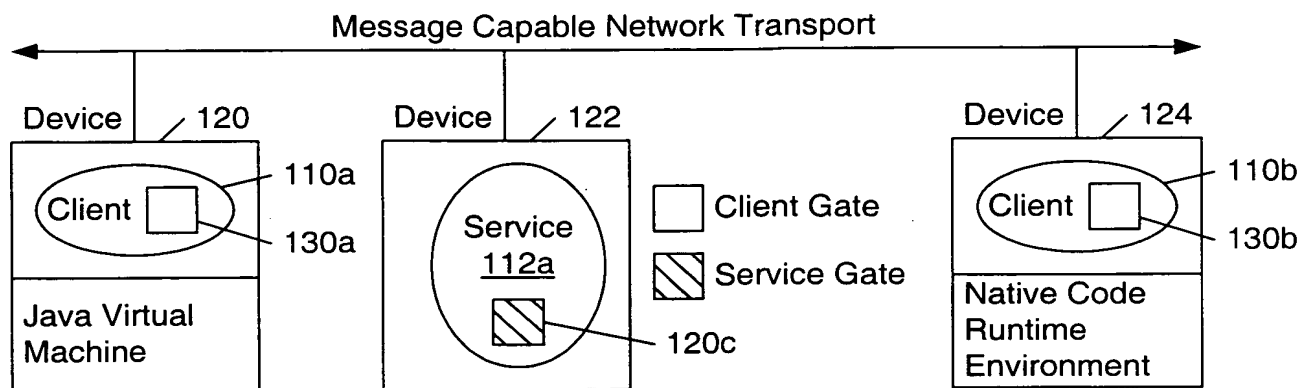


Fig. 10a

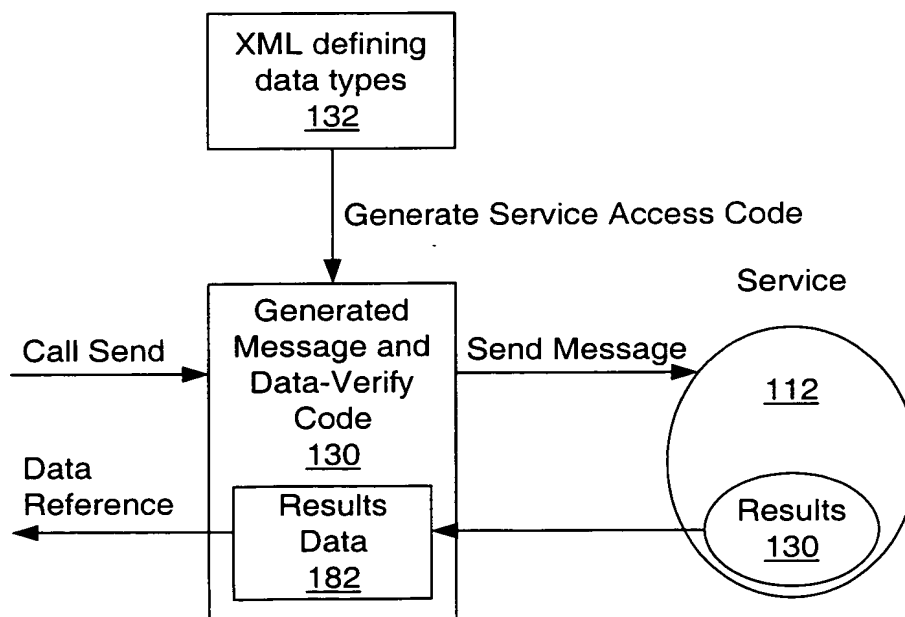


Fig. 10b

The diagram illustrates the interaction between a Client and a Service. The Client component (left circle) contains three sub-components: a Service Advertisement (from space) 132, a Gate Factory 140, and a Gate 130a. The Service Advertisement 132 is connected to the Gate Factory 140 by a downward arrow. The Gate Factory 140 is connected to Gate 130a by a downward arrow. An arrow labeled 'Creation' points to the Gate Factory 140 from the left. An arrow labeled 'Use' points to Gate 130a from the left. The Service component (right circle) contains a Gate 130c. A double-headed arrow labeled 'XML Messages' connects Gate 130a in the Client to Gate 130c in the Service.

Fig. 11b

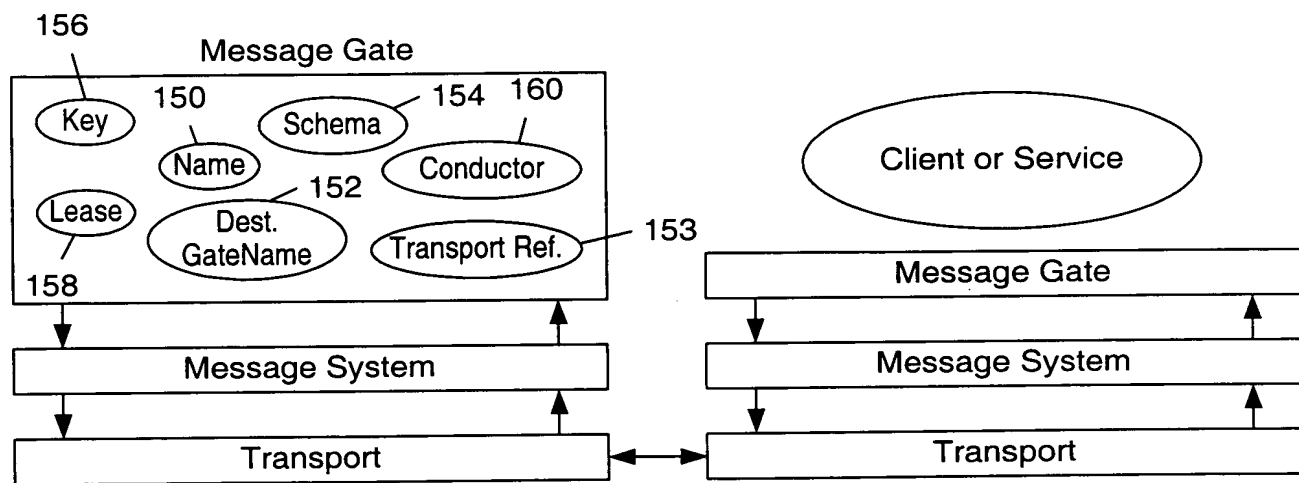


Fig. 12

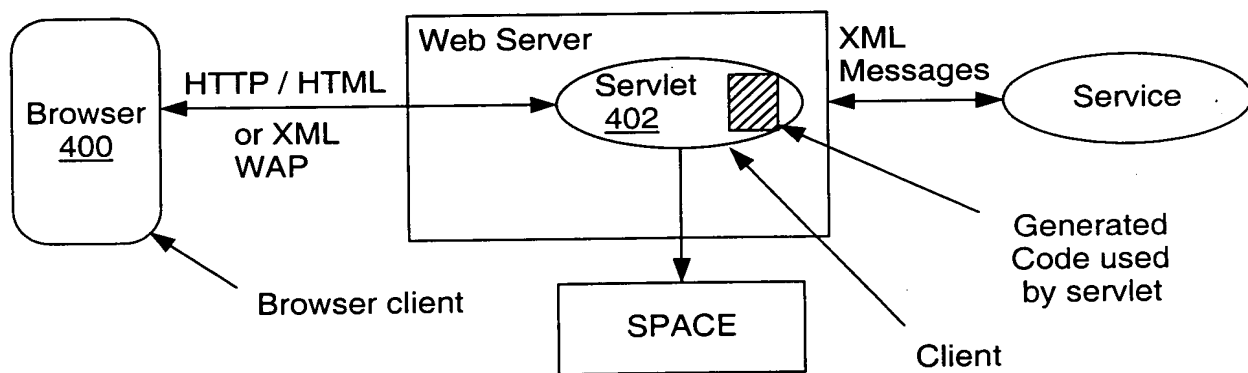
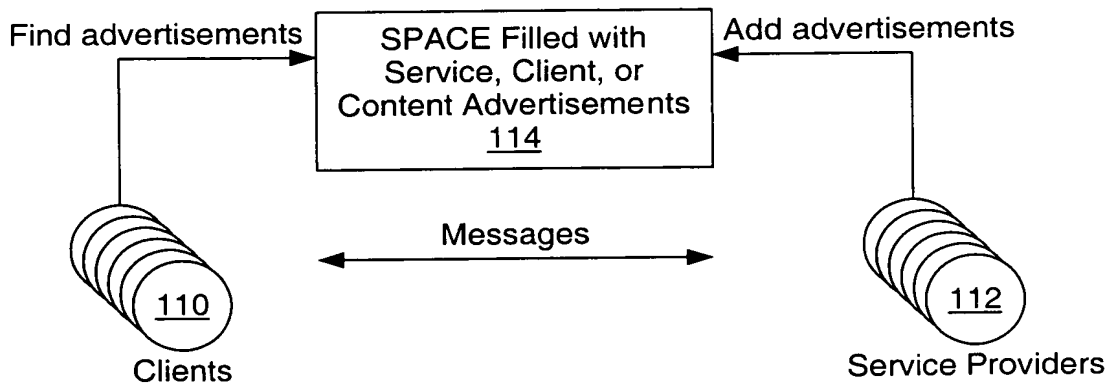
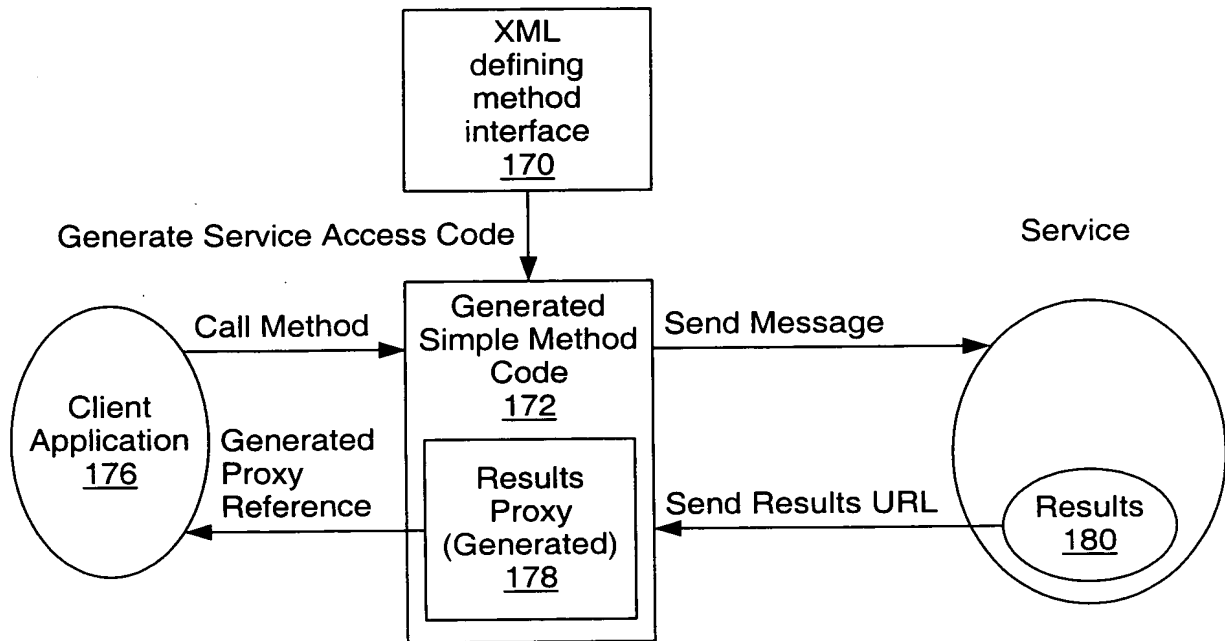


Fig. 13



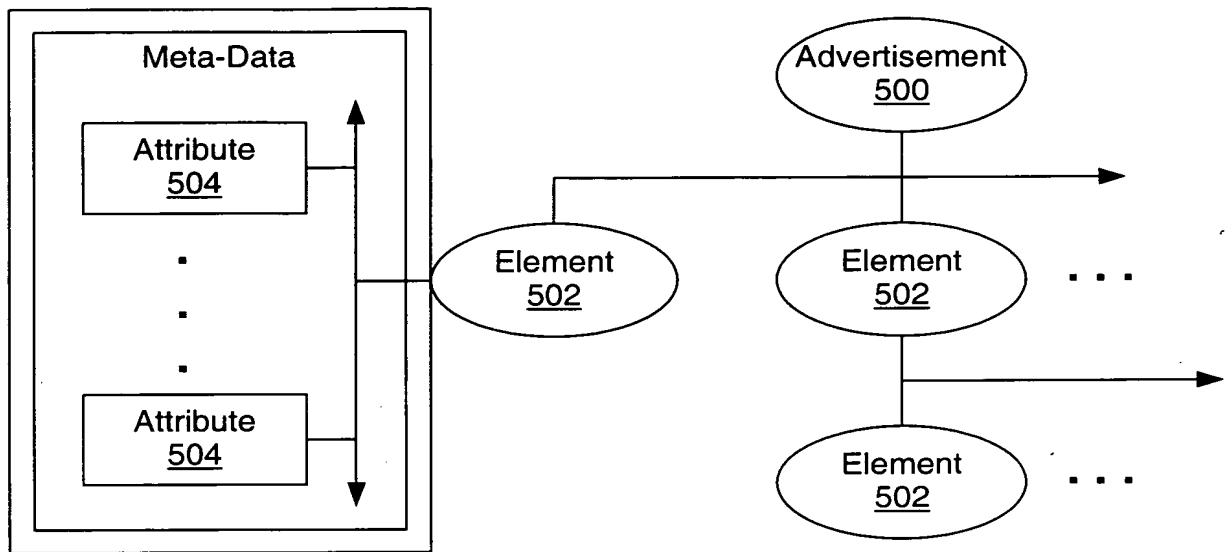


Fig. 16

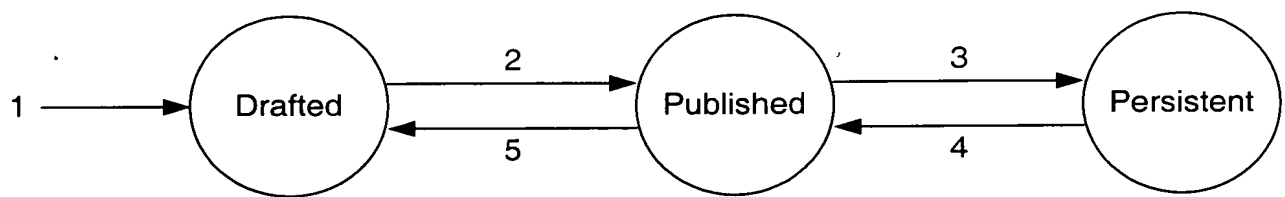


Fig. 17

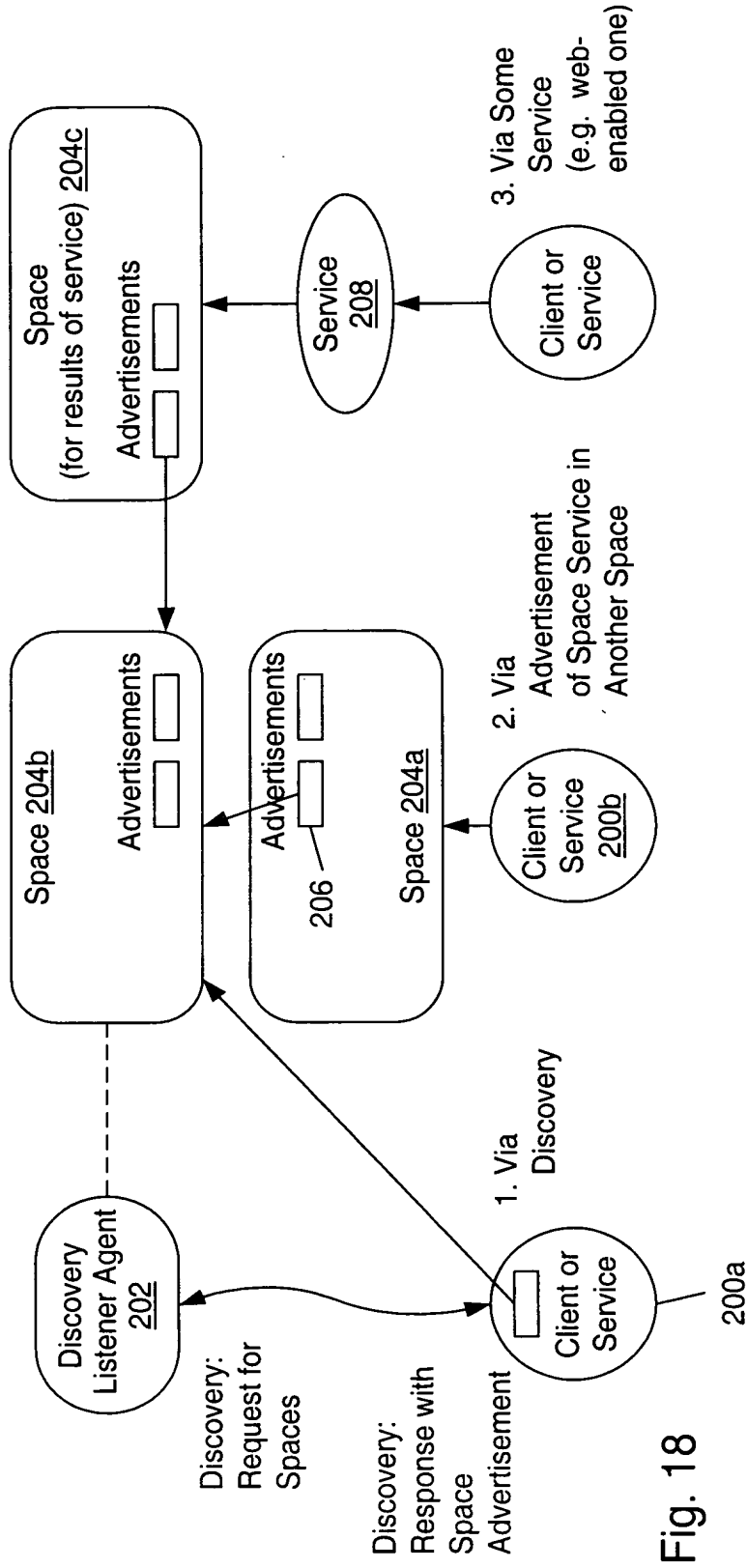


Fig. 18

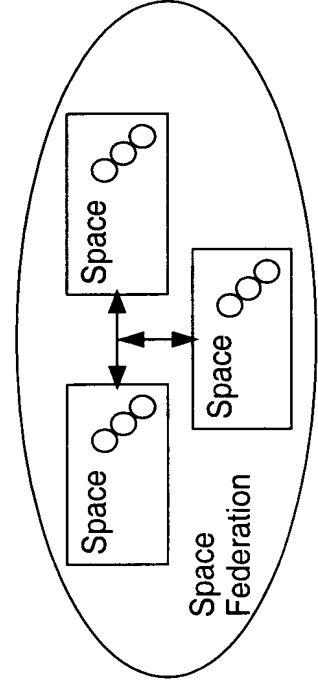


Fig. 19

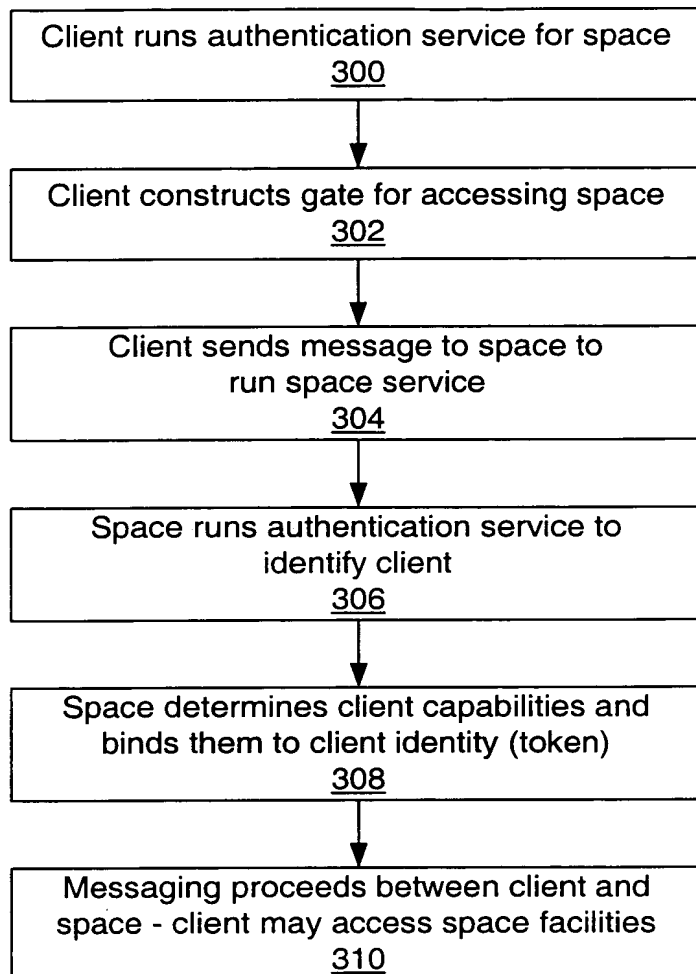


Fig. 20

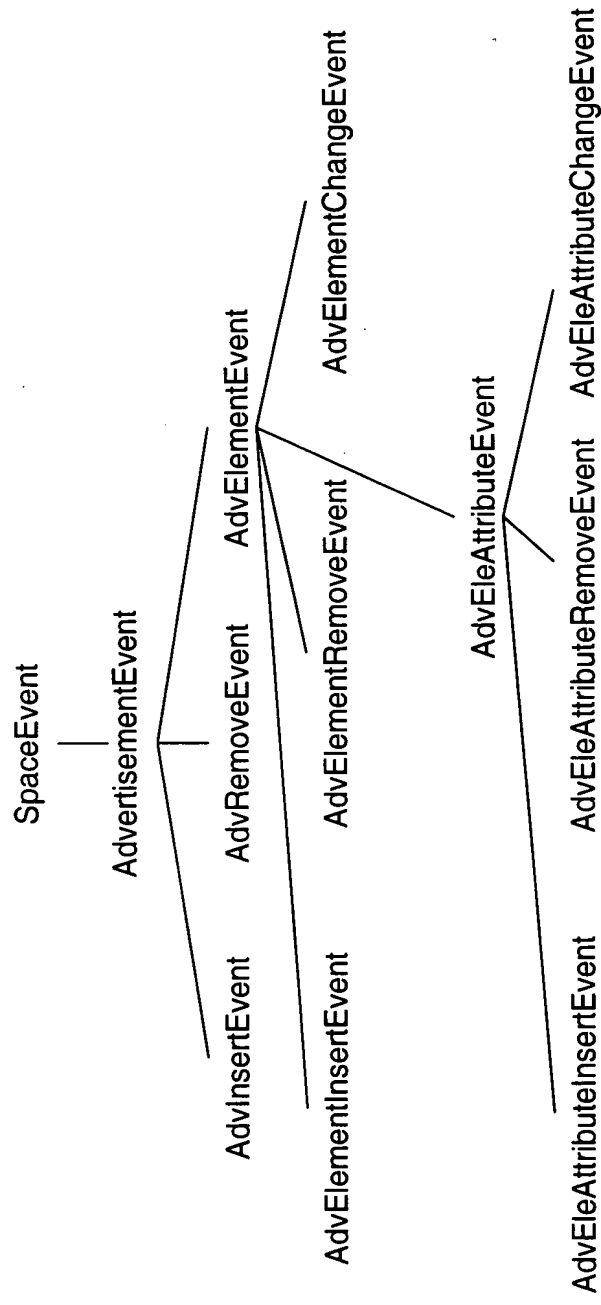


Fig. 21

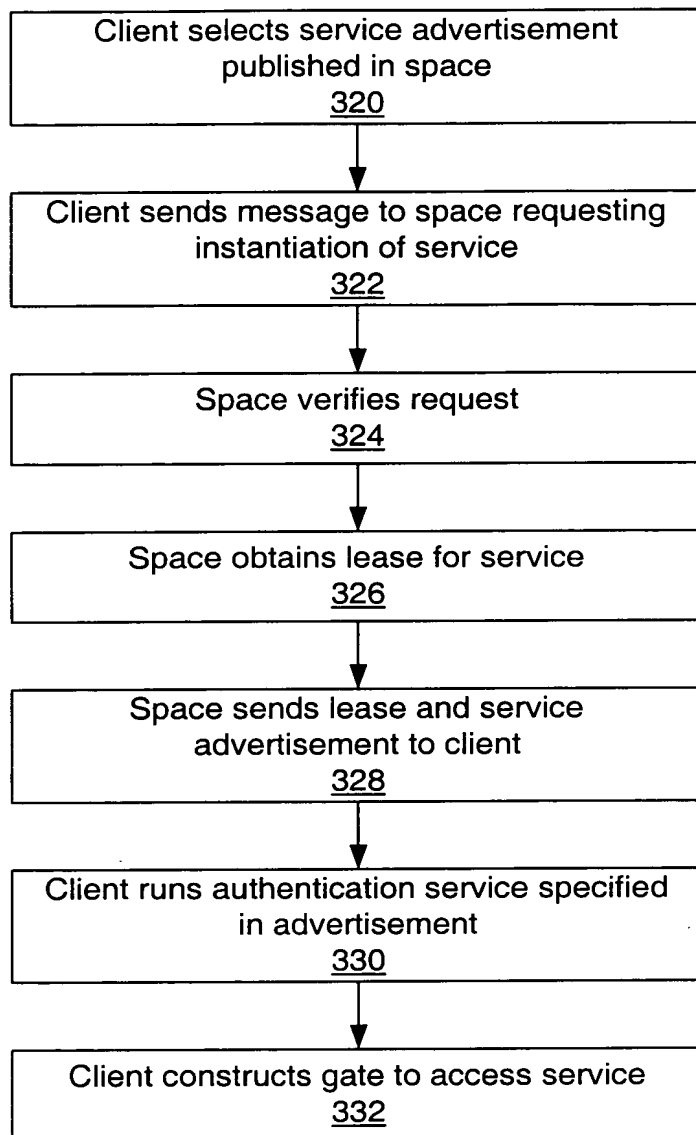


Fig. 22

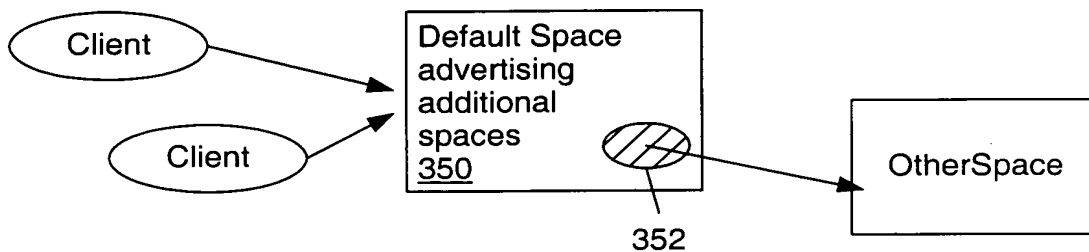


Fig. 23

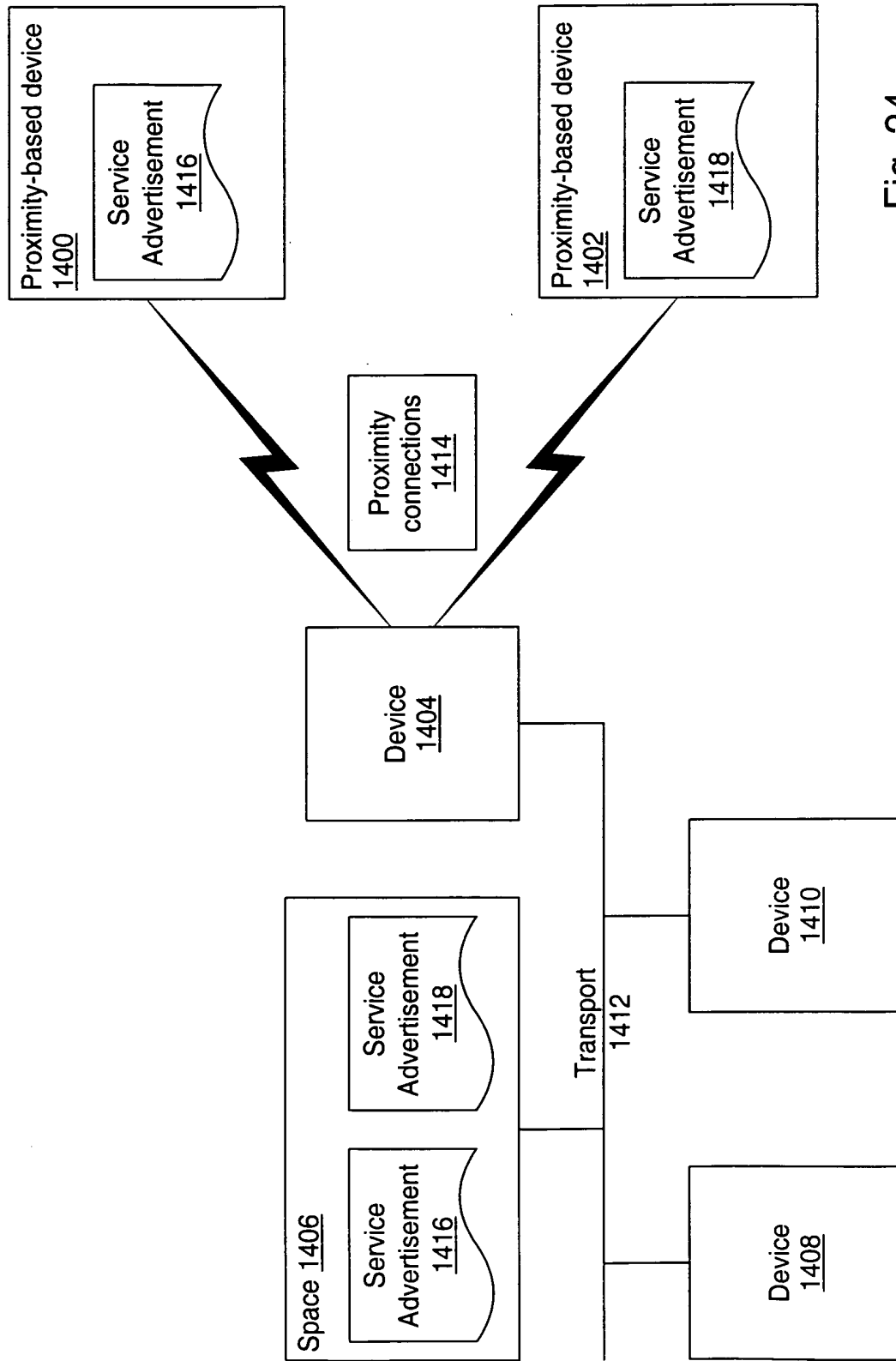


Fig. 24

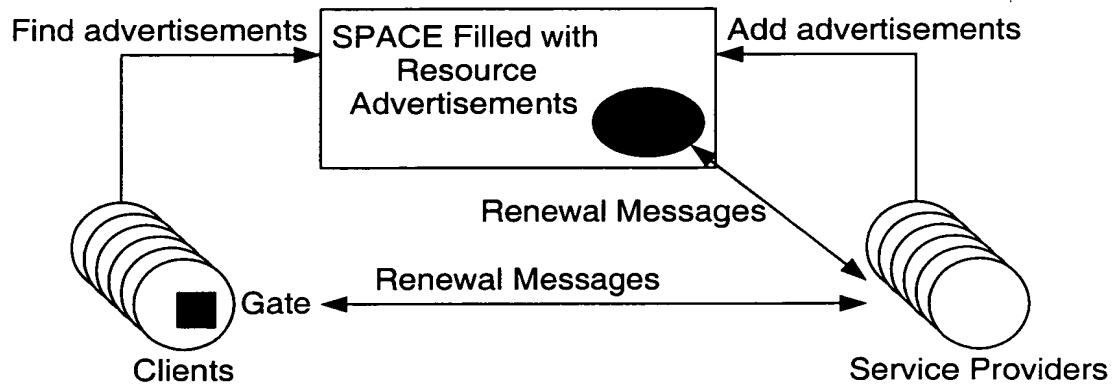


Fig. 25

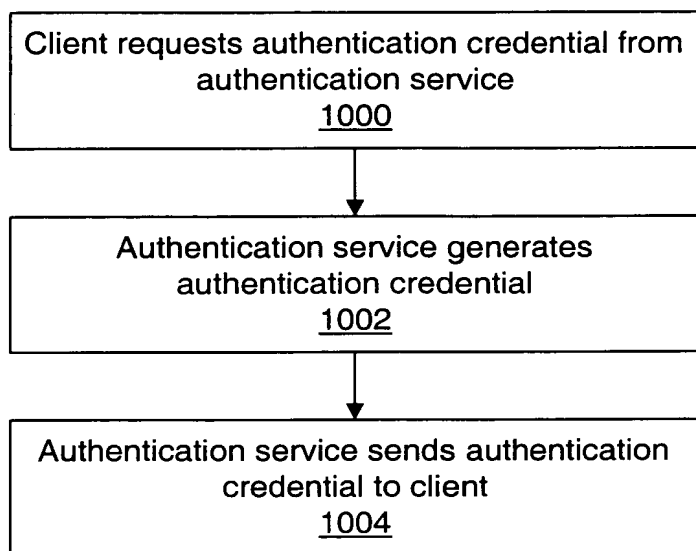


FIG. 26a

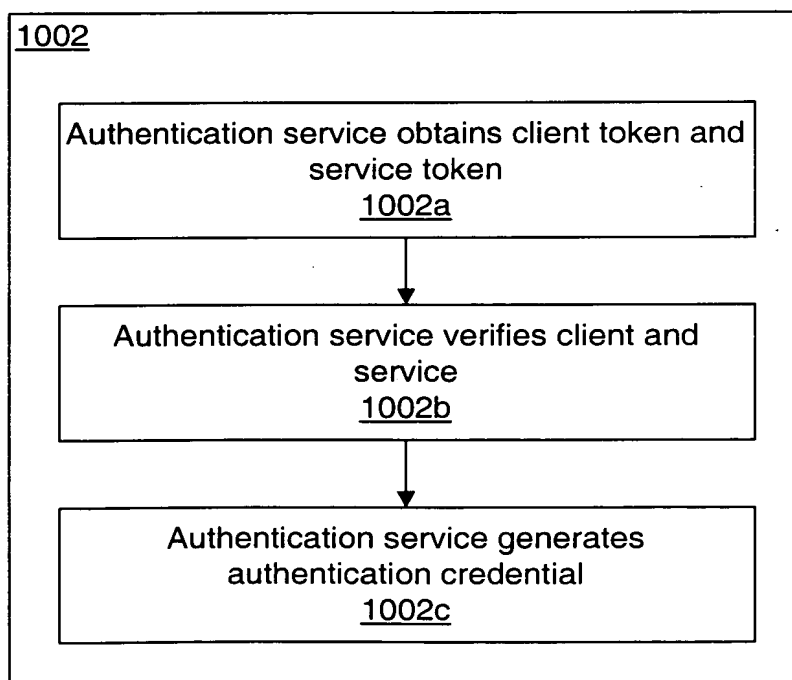


FIG. 26b

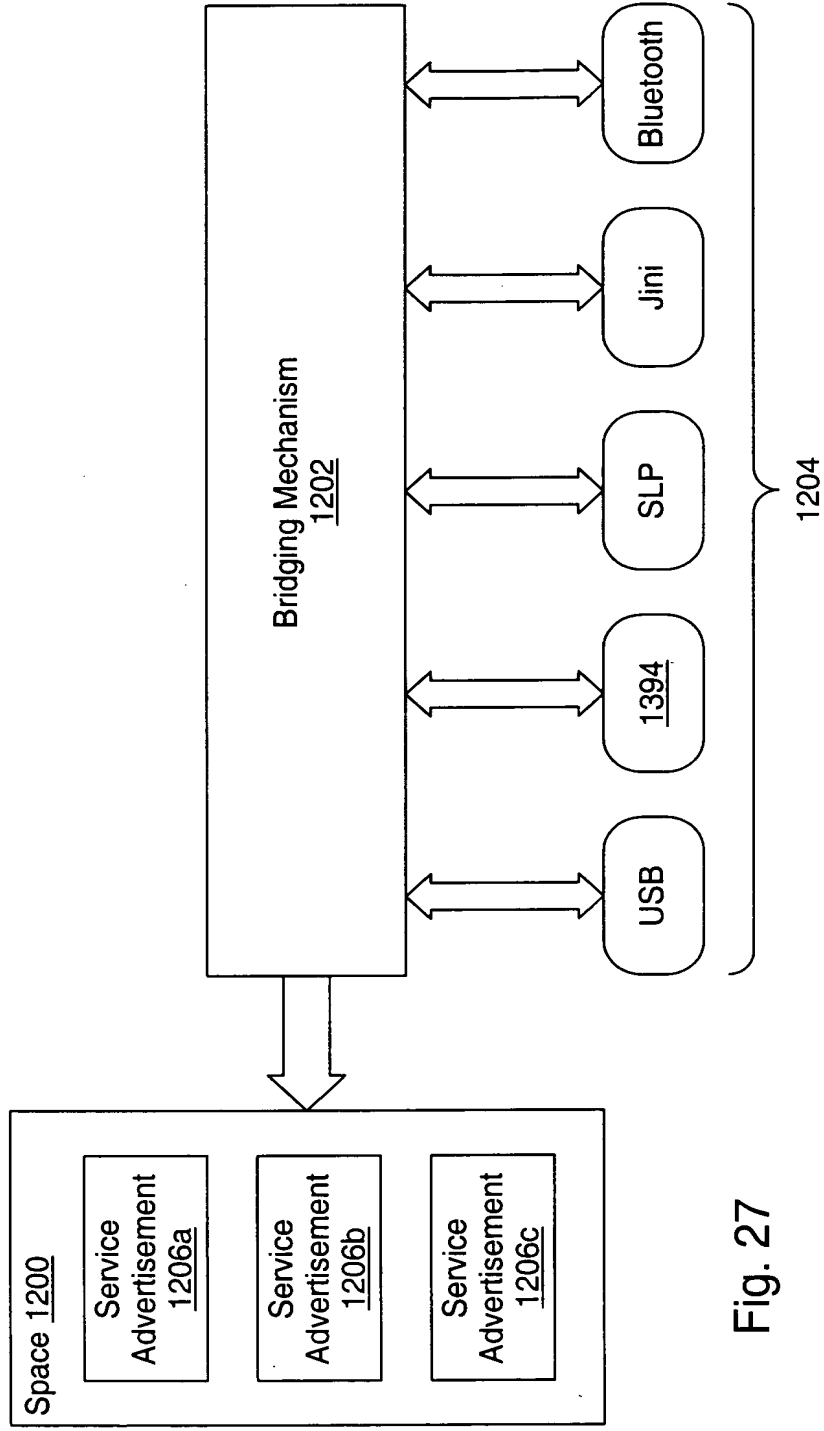


Fig. 27

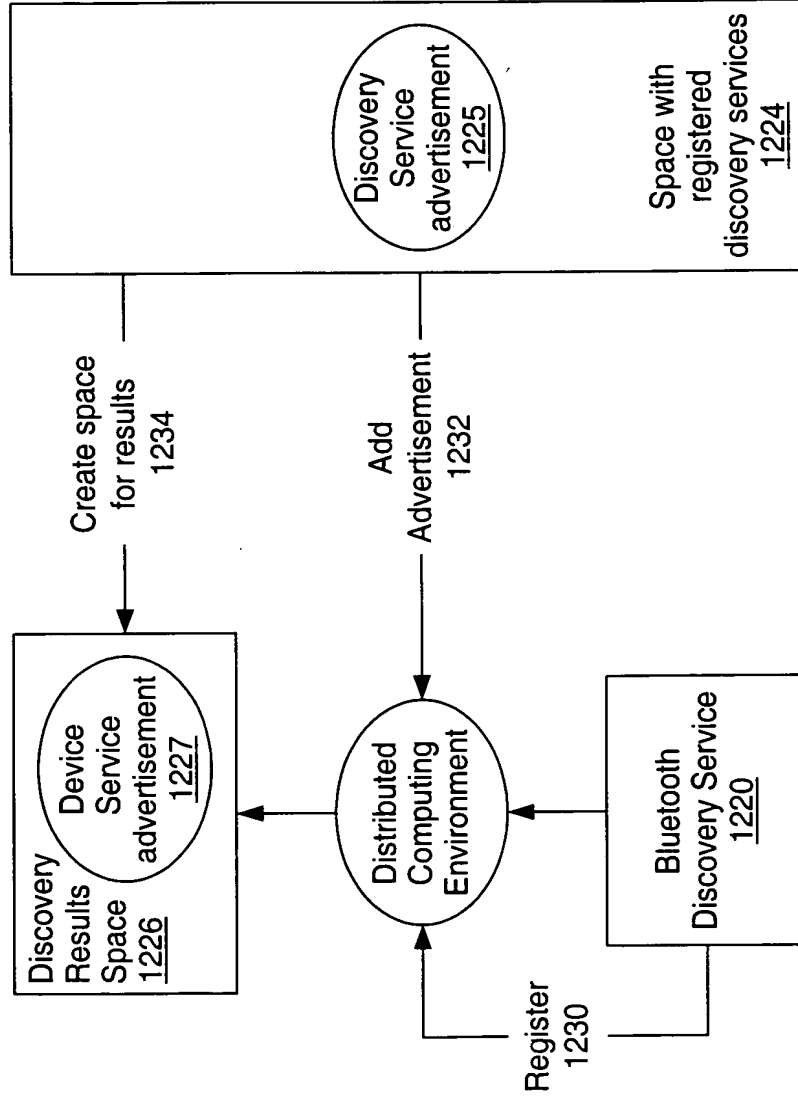


Fig. 28

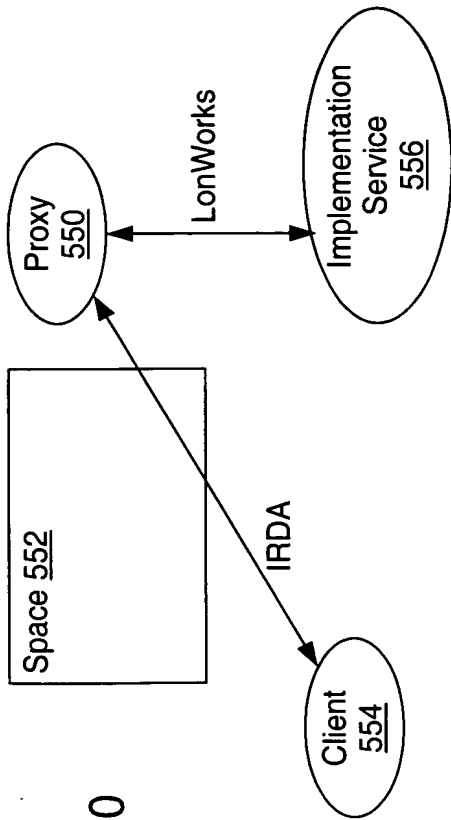


Fig. 30

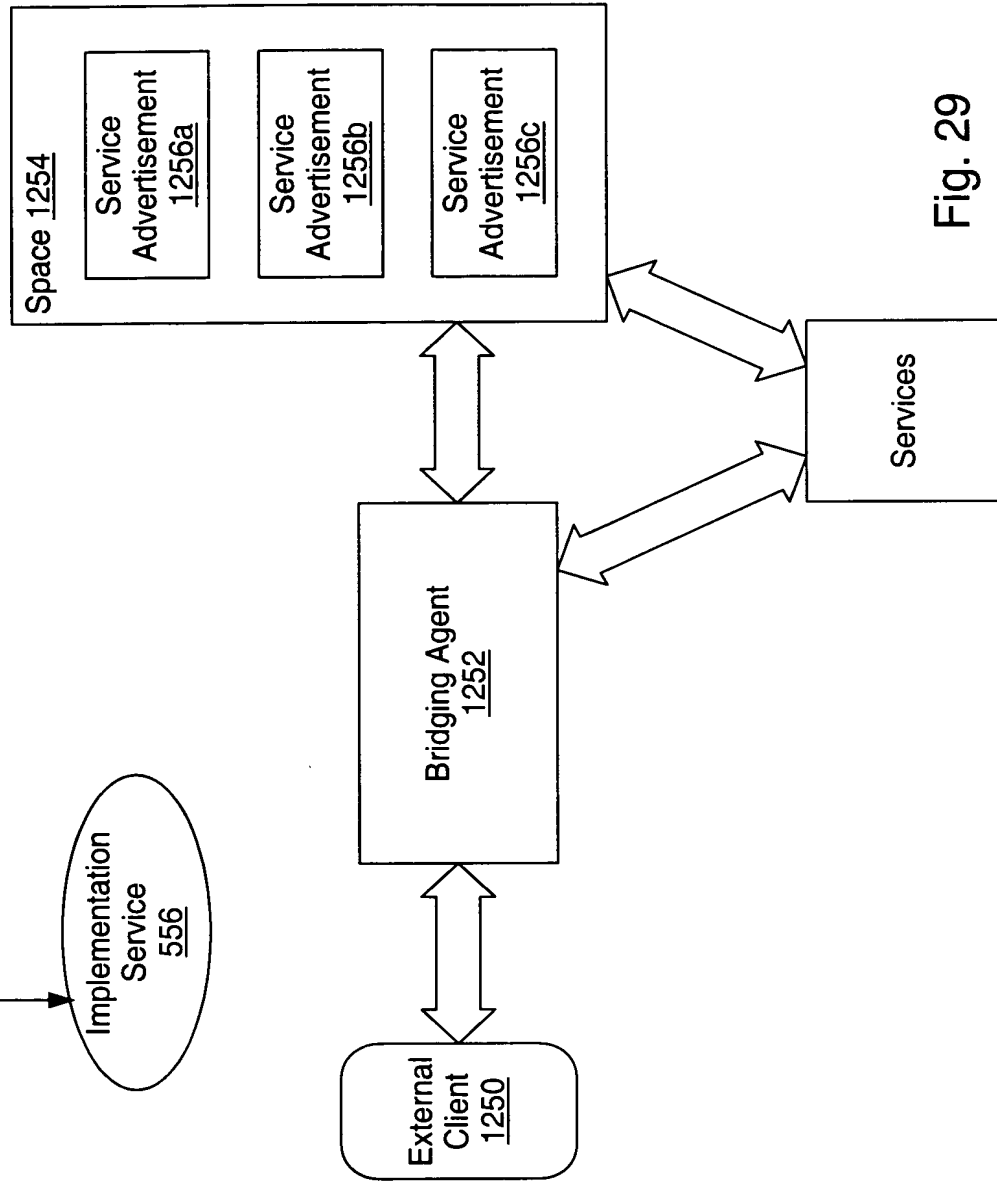


Fig. 29

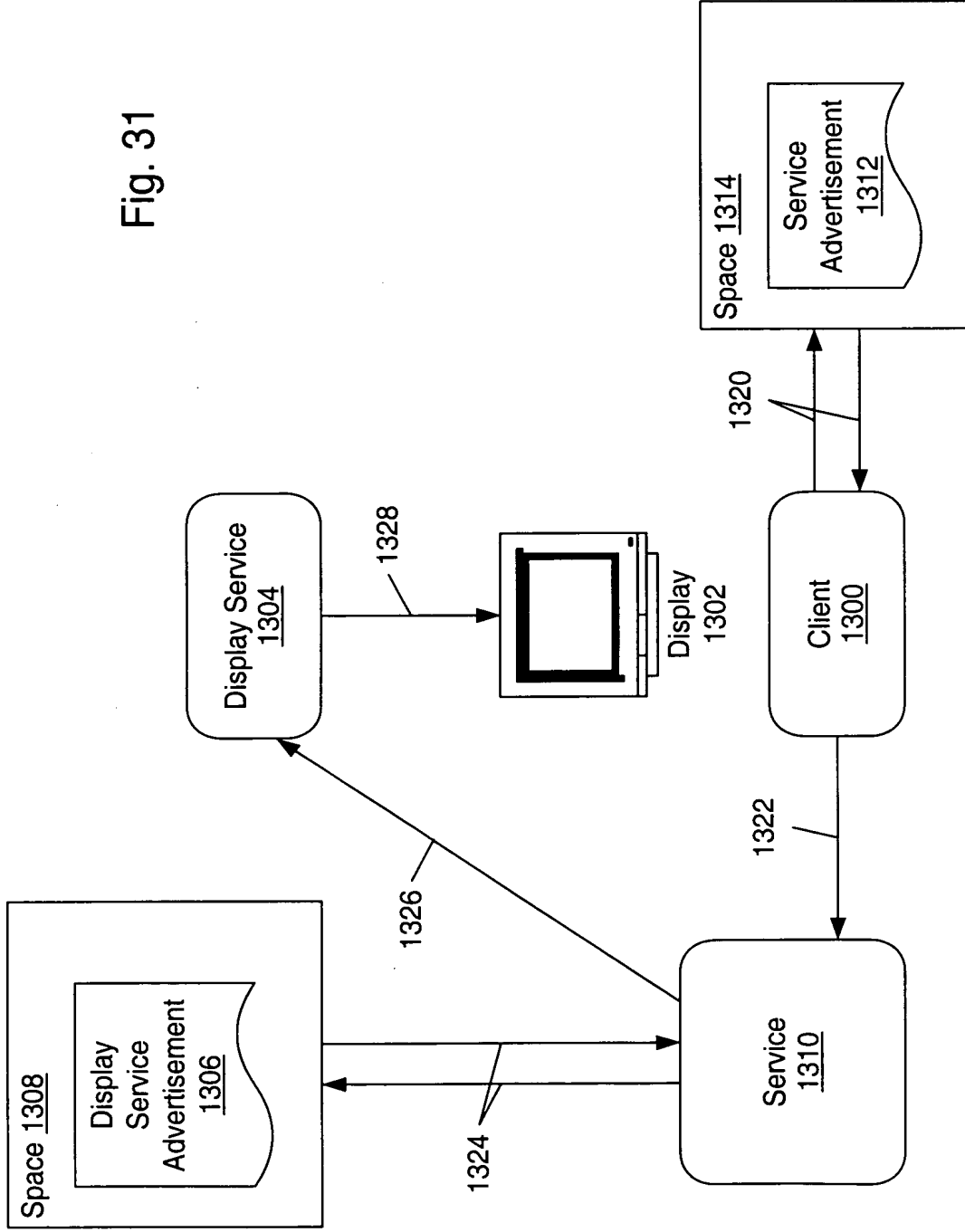


Fig. 31

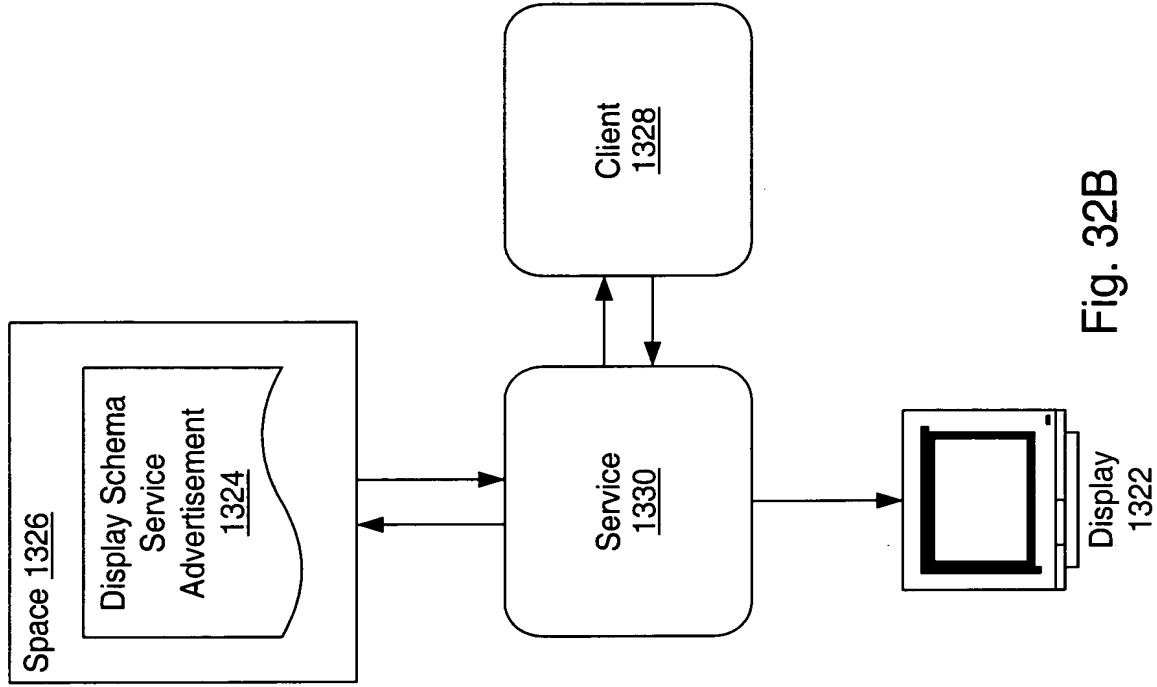


Fig. 32B

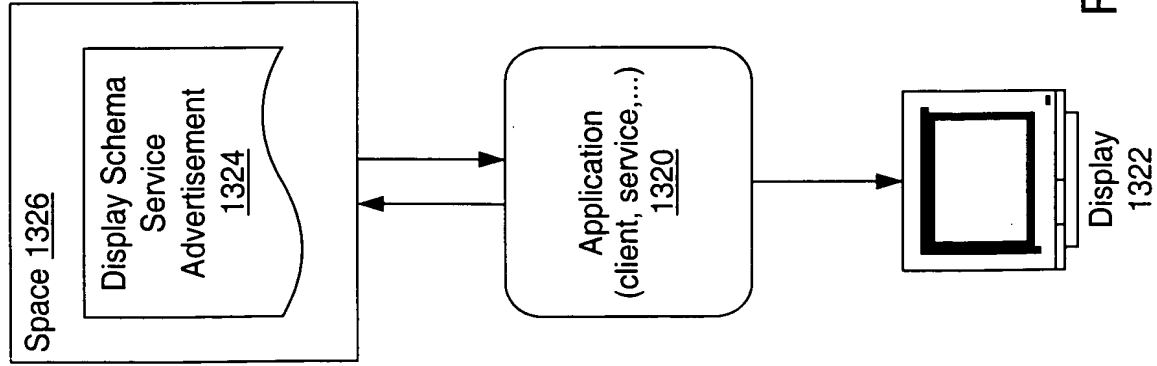


Fig. 32A

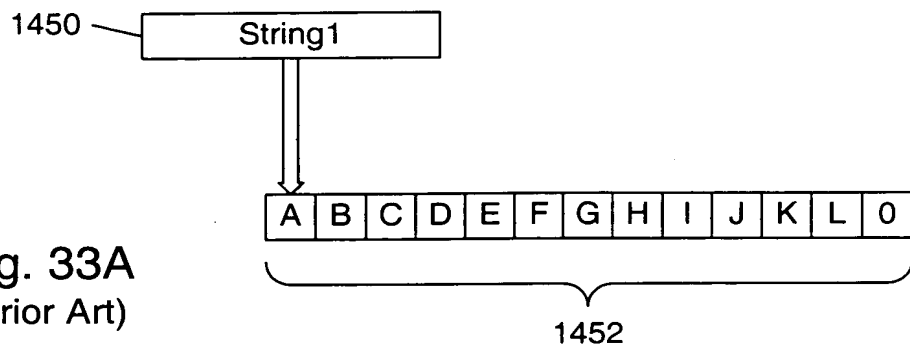


Fig. 33A
(Prior Art)

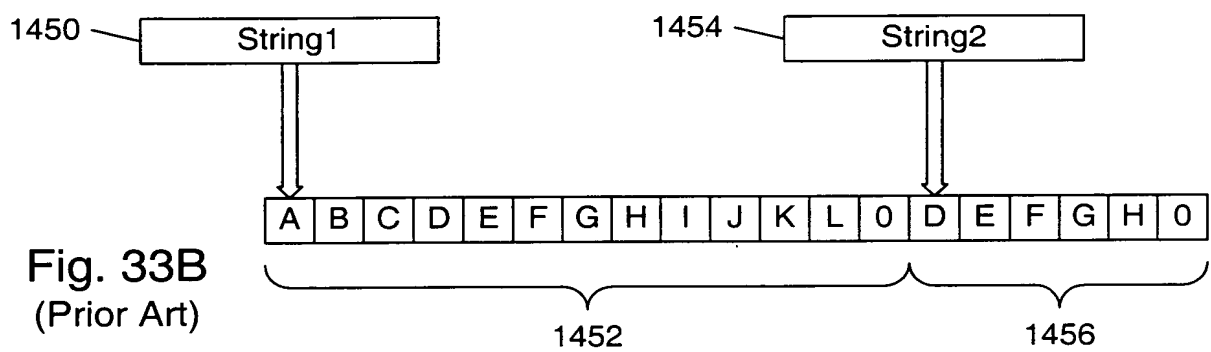


Fig. 33B
(Prior Art)

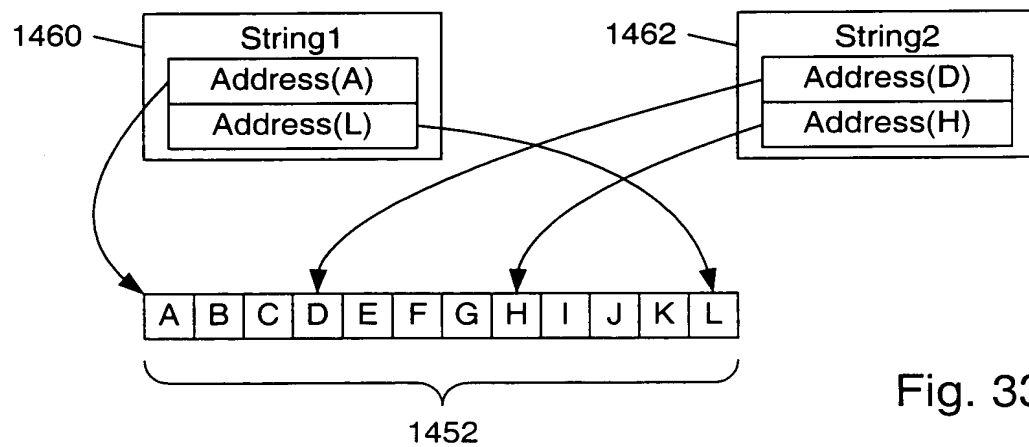


Fig. 33C

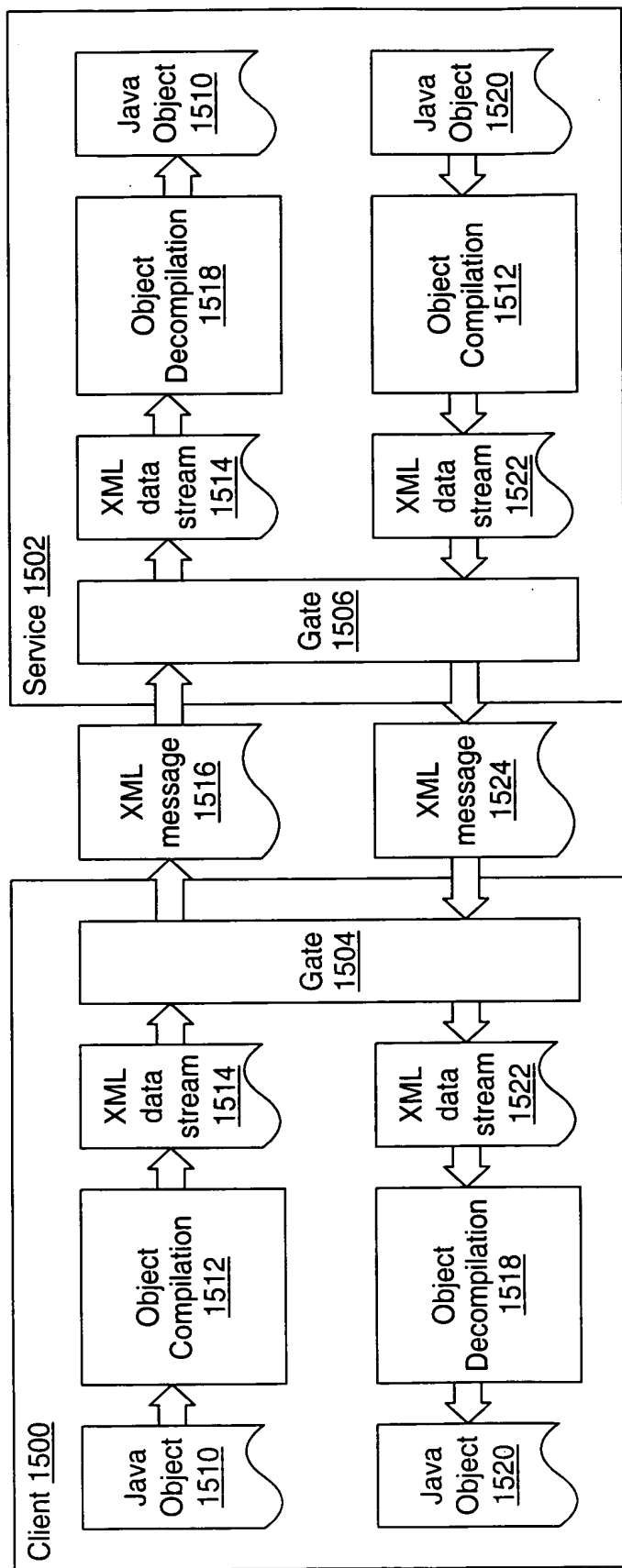


Fig. 34

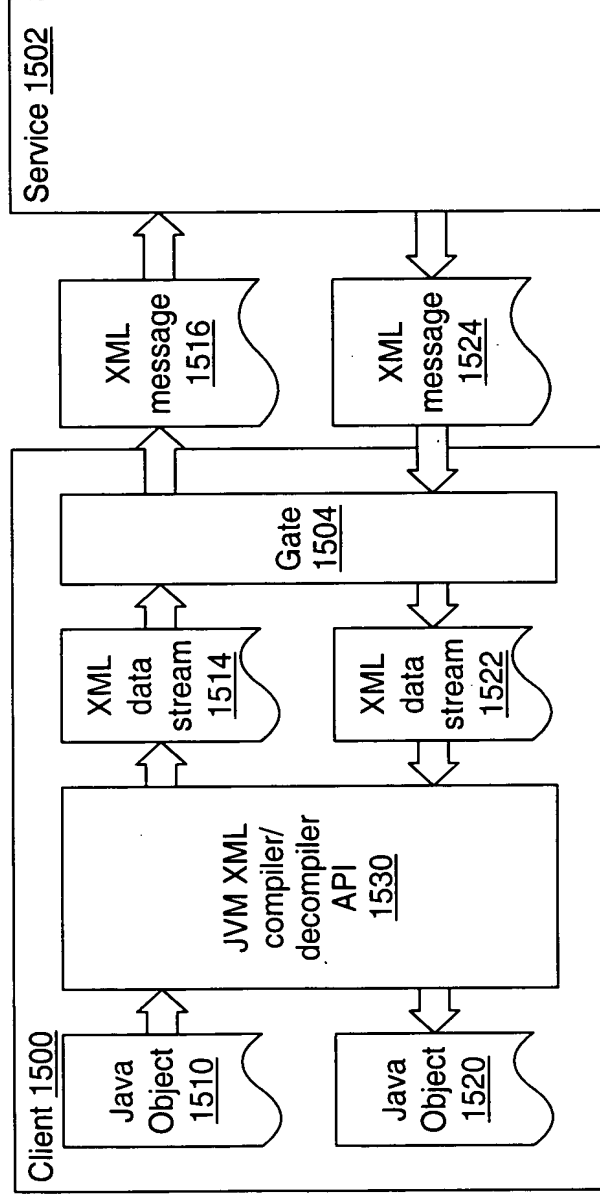


Fig. 35a

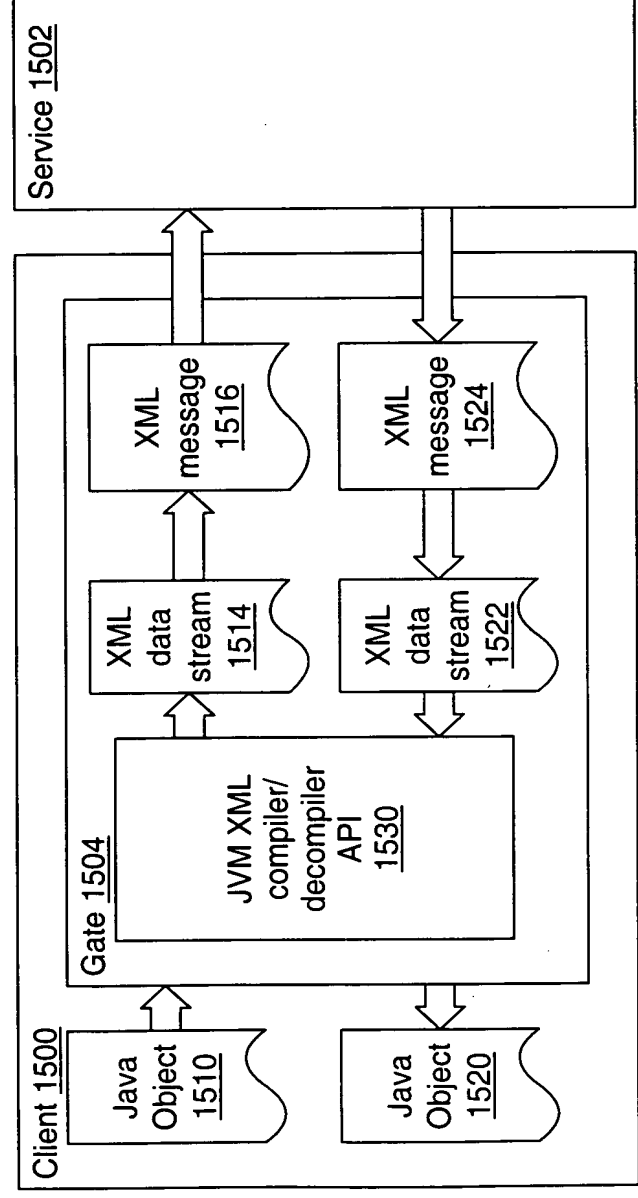


Fig. 35b

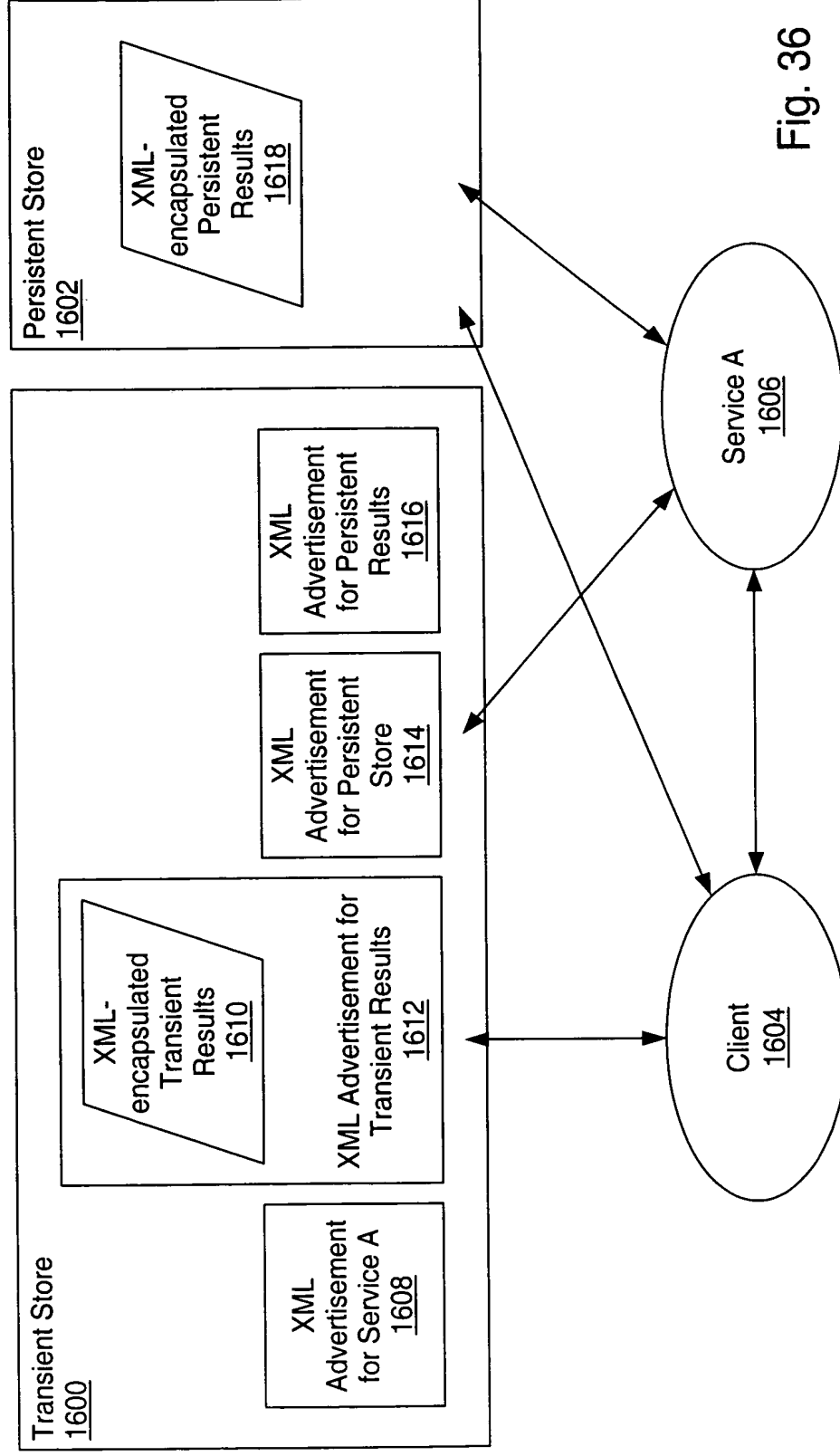


Fig. 36

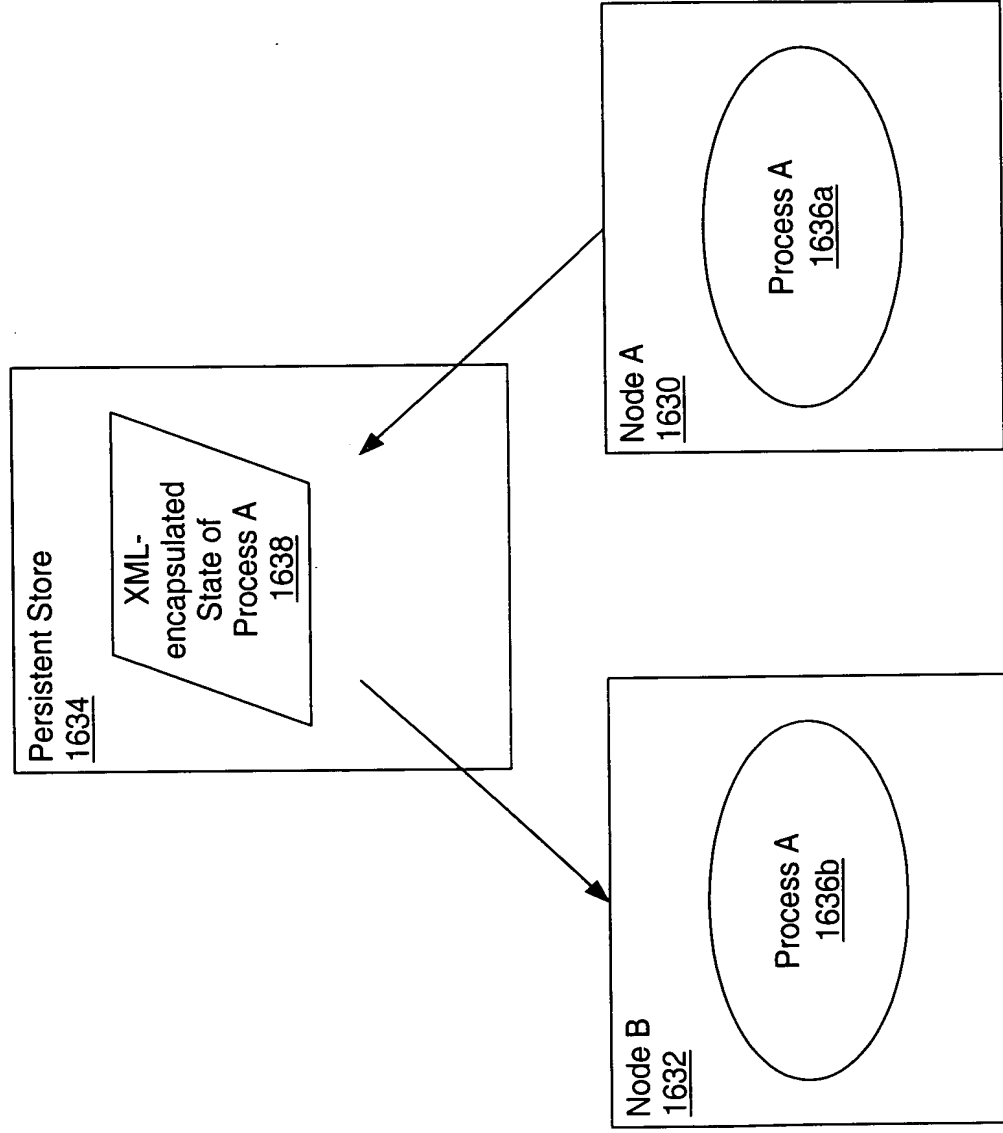


Fig. 37

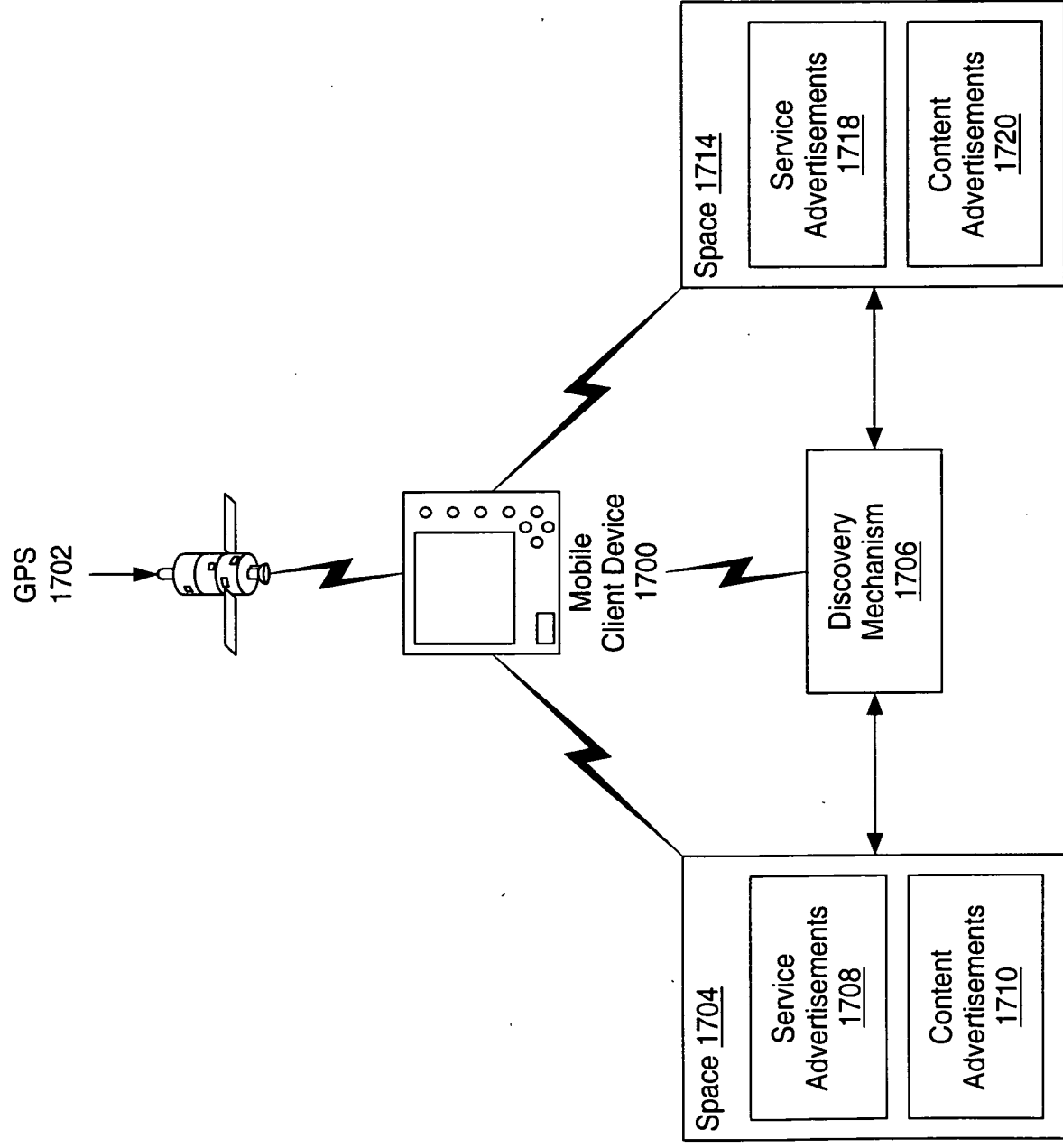


Fig. 38

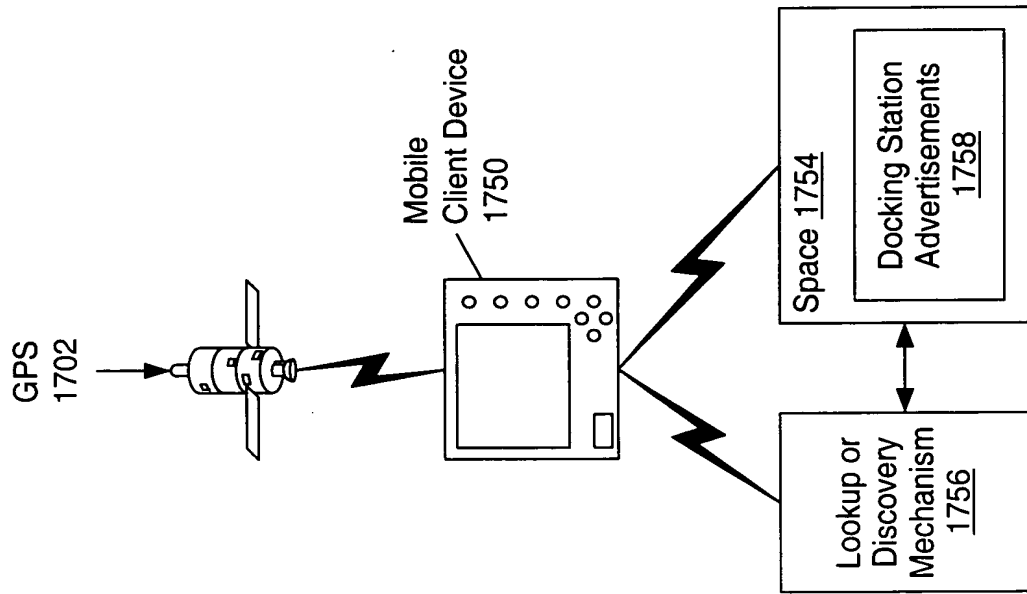


Fig. 39a

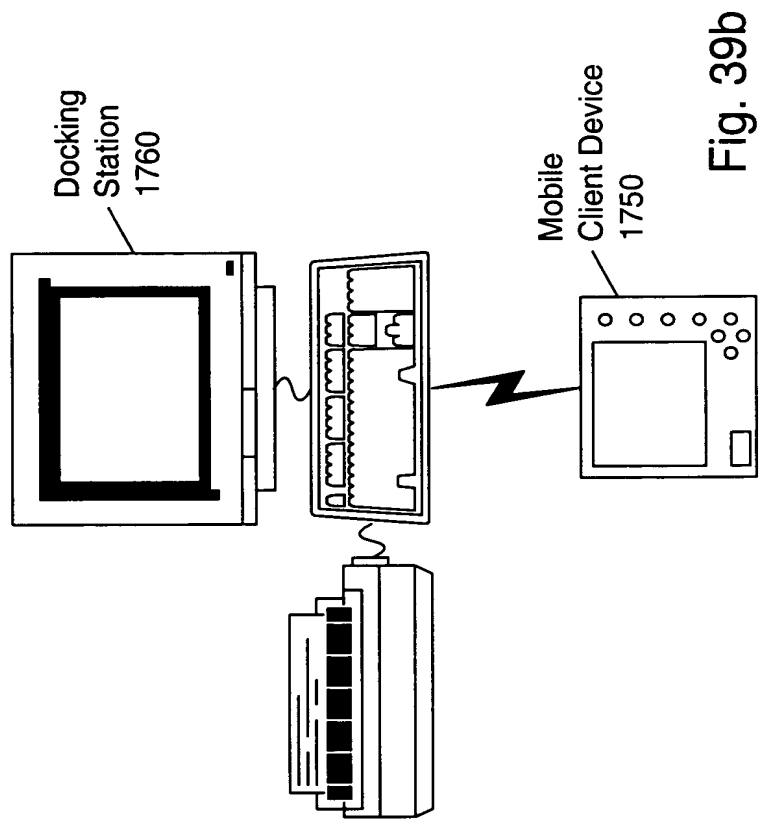


Fig. 39b

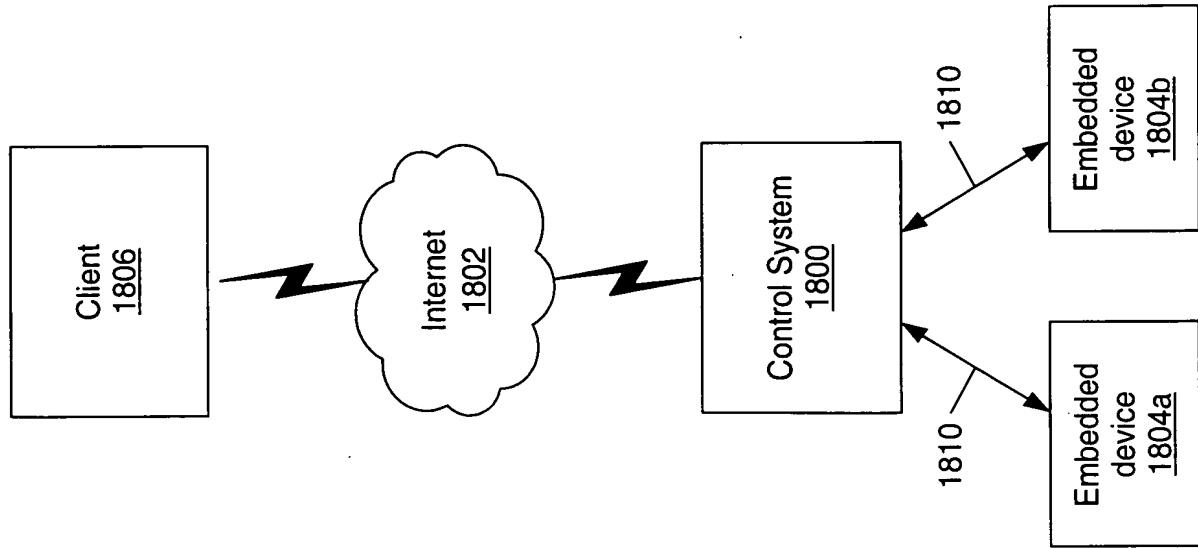


Fig. 40a

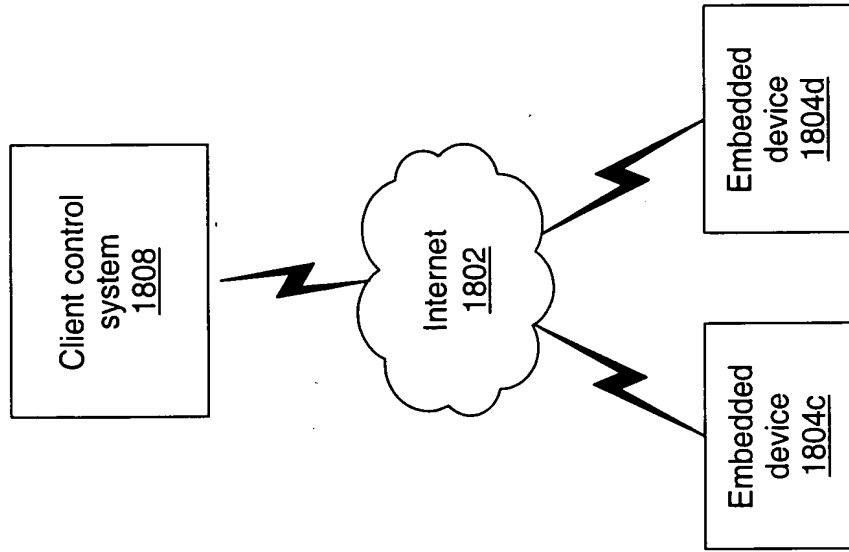


Fig. 40b

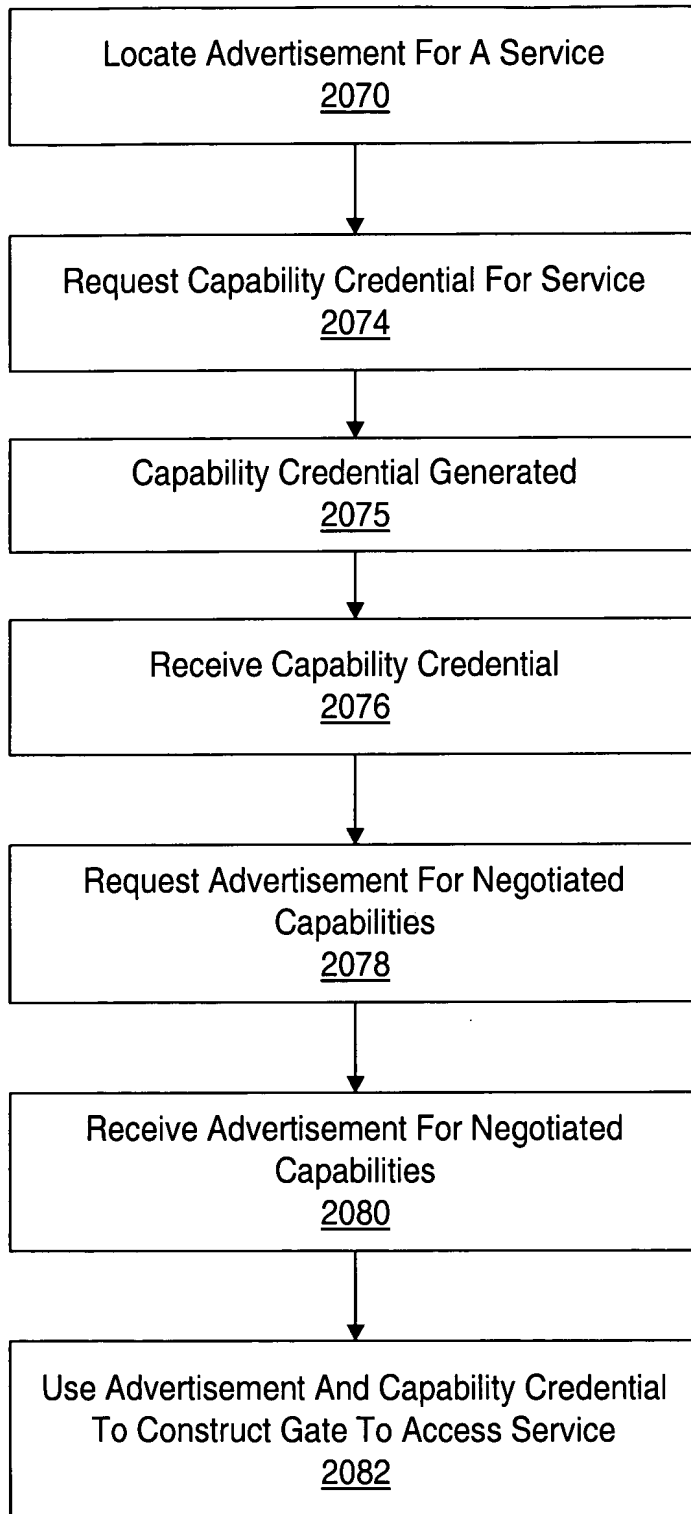


FIG. 41

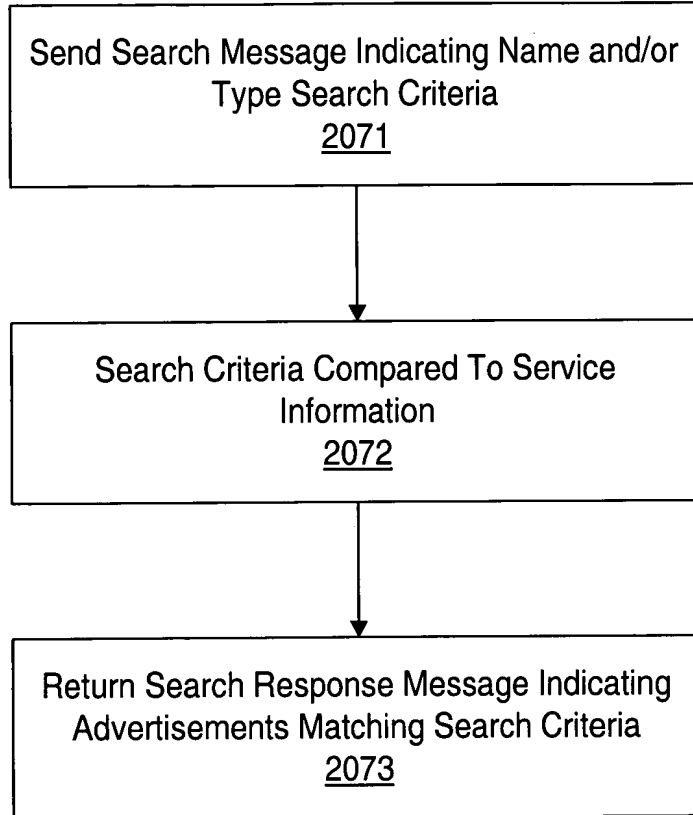


FIG. 42

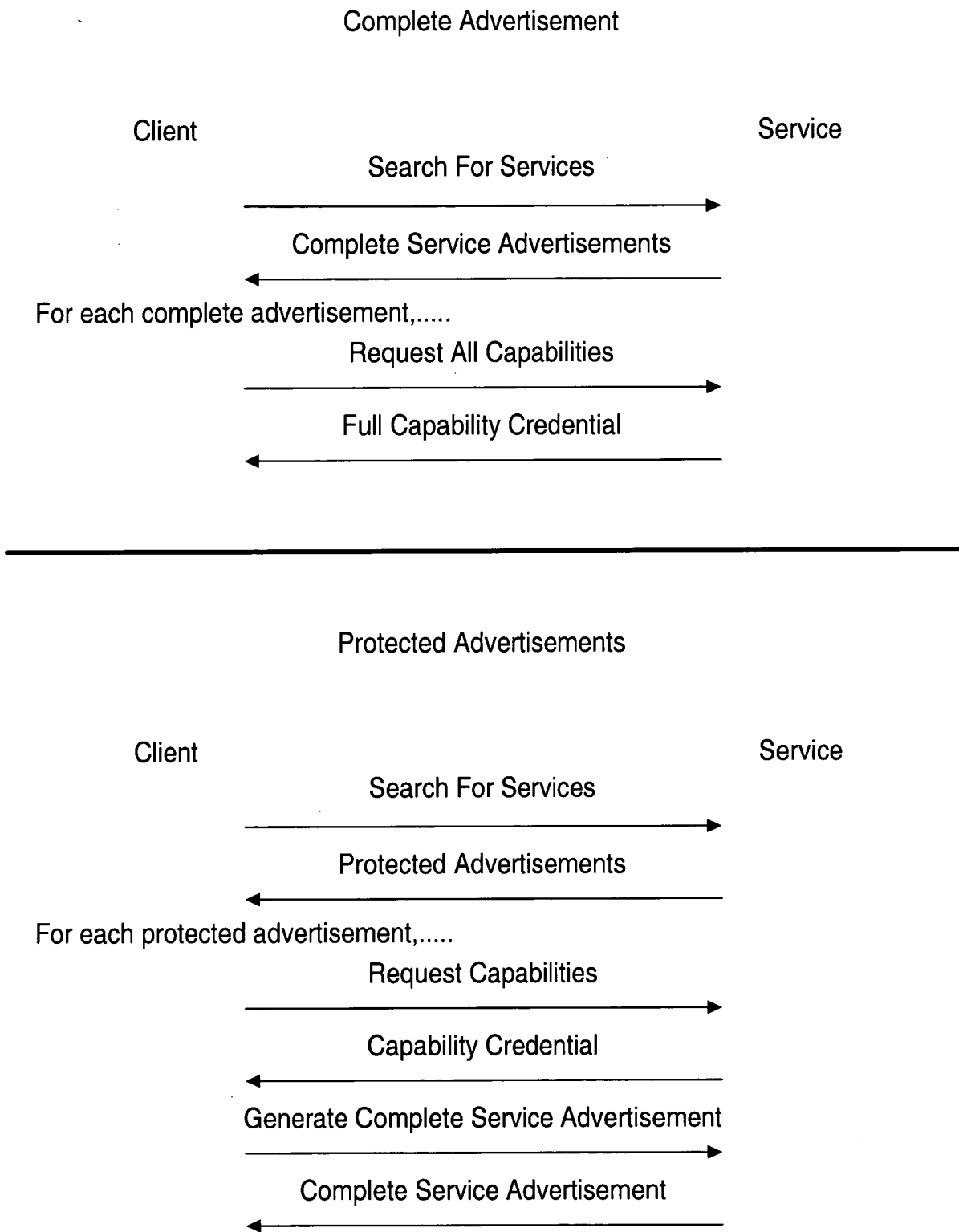


FIG. 43

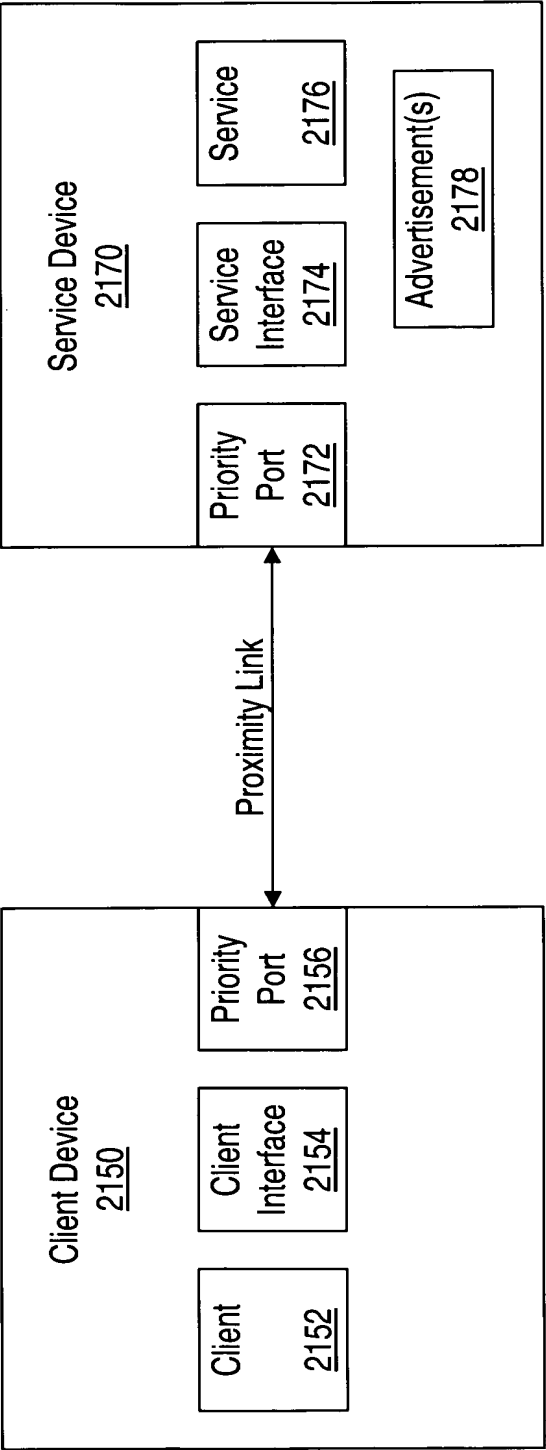


FIG. 44

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graph TD
    2190[Form Proximity Connection To Service Device  
2190] --> 2192[Request Advertisement Over Proximity  
Connection  
2192]
    2192 --> 2194[Receive Advertisement Directly From Service  
Device Over Proximity Connection  
2194]
    2194 --> 2196[Construct Gate To Access Service Over The  
Proximity Connection  
2196]

```

FIG. 45

Space Services Register With Listener Agent



Client Sends Space Discovery Request

2204



Listener Agent Receives Space Discovery Request



Listener Agent Returns Space Service
Advertisement(s) (by Reference or Directly)
2208



Client Uses a Discovered Space Service
Advertisement to Create a Gate for Accessing a
Space
2210



Client Looks up Advertisements in the Space to
Access Services or Content
- 2212

FIG. 46

Client Accesses Discovery Service to Obtain
Space Service Advertisement
2222



Discovery Service Locates Space Service
Advertisement(s), e.g. Through Listener Agent
or Search Engine
2224



Discovery Service Returns Space Service
Advertisement(s) (by Reference or Directly)
2226



Client Uses a Discovered Space Service
Advertisement to Create a Gate for Accessing a
Space
2228



Client Looks up Advertisements in the Space to
Access Services or Content
2230

FIG. 47